

Alaska's Drinking Water and Wastewater Program

Arsenic Rule Fact Sheet

What has changed?

The Maximum Contaminant Level (MCL) for arsenic has been reduced from 50 µg/L to 10 µg/L. The new arsenic MCL, 10 µg/L, is equivalent to 10 parts per billion (ppb).

Who must comply with this change and when?

All Class A public water systems (PWS) in Alaska [Community Water Systems (CWS) and Non-transient, Non-community Water Systems (NTNCWS)], will be required to meet the arsenic MCL of 10 µg/L by January 23, 2006.

In addition, after January 22, 2002, any CWS that detects arsenic at or above the "action level" of 5 µg/L, but below 10 µg/L, must include in its CCR due by July 1, 2002, a short arsenic "educational statement" using language similar to the following:

"While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems."

After January 22, 2002, a CWS that detects arsenic from 10 µg/L and up to 50 µg/L must include the arsenic "health effects" language prescribed by the CCR Rule, beginning with CCRs that are due by July 1, 2002 and ending with those CCRs due July 1, 2006. The EPA arsenic "health effects" statement is the following:

"Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer."

(Both the "educational" and "health effect" statements may be obtained from the EPA draft *Implementation Guidance for Arsenic*, Table I-1, page I-10, November 2001.)

What are the initial and routine monitoring requirements, and can they be increased?

Arsenic Monitoring Requirements			
Type of Source	Initial Monitoring ¹	Routine Monitoring	Increased Monitoring
Surface Water (SW)	If no grandfathered data ² is used, SW systems must collect one initial sample between January 23, 2006 and December 31, 2006.	SW systems must collect annual samples.	A SW system with a sampling point result above the MCL of 10 µg/L must collect quarterly samples at that sampling point, until the system is reliably and consistently below the MCL.

Arsenic Monitoring Requirements			
Type of Source	Initial Monitoring ¹	Routine Monitoring	Increased Monitoring
Groundwater (GW)	If no grandfathered data ³ is used, GW systems must collect one initial sample between January 1, 2005 and December 31, 2007	GW system must collect one sample per compliance period.	A GW system with a sampling point result above the MCL of 10 µg/L must collect quarterly samples at that sampling point, until the system is reliably and consistently below the MCL.
¹ Initial sample due after the effective date of the new arsenic MCL (January 23, 2006). ² For a SW system to use grandfathered data they must have collected all routine annual compliance samples between January 1, 2002 and January 23, 2006, use data results from analytical methodology approved for use by the Arsenic Rule, and analytical results from all samples must be below the MCL of 10 µg/L. ³ For a GW system to use grandfathered data they must have three rounds of ground water samples with analytical results under 10 µg/L, use data results from analytical methods approved for use by the Arsenic Rule, and include data from the compliance periods of 1993-95, 1996-1998, and 1999-2001 or between January 1, 2002 and January 23, 2006.			

Can a PWS ask for and receive a monitoring waiver for arsenic?

Yes, you may apply for a waiver after January 23, 2006 if you have never exceeded the MCL of 10 µg/L. Under the final Arsenic Rule, the department may grant a 9-year monitoring waiver to a system. To qualify for a waiver, a system must have data from three previous compliance periods within the previous compliance cycle (9 years). Analytical results from all samples must be below the MCL of 10 µg/L. The department will consider data collected after January 1, 1993, if the data is consistent with the analytical methodology and detection limits of the Arsenic Rule. If data is not consistent with analytical methodologies for arsenic under the Arsenic Rule, then the data will not be accepted.

Analytical Methodologies for Arsenic	
ICP-Mass Spectroscopy	EPA 200.8
Atomic Absorption; Platform	EPA 200.9
Atomic Absorption; Furnace	ASTM D-2972-93C, SM 3113B
Hydride Atomic Absorption	ASTM D-2972-93B, SM 3114B

What can I do now towards meeting the new MCL?

In order to know which systems will need to undertake action to meet the new MCL and ensure there is enough time to accomplish whatever may need to be done, DEC is requiring all Class A PWS to collect and have analyzed a raw water sample for arsenic during calendar year 2002 from each of their sources. If results of the raw water arsenic sample are reported at a level of 5 µg/L or above (half the new MCL), DEC will also require a treated water sample to be collected.

What if the system doesn't comply with the MCL?

There is no exemption or variance for an MCL of a regulated drinking water contaminant, and compliance with an MCL cannot be waived. If a Class A PWS does not meet the new MCL by January 23, 2006, then the PWS owner is responsible for developing and implementing alternatives. These alternatives would include: developing a new source, treatment modifications, connecting to another PWS, or providing bottled water to all customers serviced by the PWS. All of the alternatives have the potential to be very costly.

What technical information is available about this Rule?

EPA has prepared a draft guidance manual to support the Arsenic Rule. This manual aids public water system owners and operators, EPA, and State agencies in implementing the rule and will help to ensure that implementation of the rule is consistent. The manual is available on the Internet at <http://www.epa.gov/safewater/ars/implement.html> and may be ordered from the Safe Drinking Water Hotline at 1 (800) 426-4791.

Glossary:

"Class A public water system" means a public water system that

- (1) is expected to serve, year-around, at least 25 individuals;
- (2) is expected to serve, year around, at least 15 residential service connections; or
- (3) regularly serves the same 25 people or more individuals for at least six months of the year.

"Community water system" means a Class A public water system that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents (e.g., most cities and towns, apartments, and mobile home parks with their own water supplies.)

"Compliance cycle" means a 9-year monitoring sequence that includes three consecutive compliance periods (e.g., 1993-1995, 1996-1998, and 1999-2001 are three consecutive compliance periods totaling 9-years.)

"Compliance period" means a three year monitoring sequence for a regulated drinking water contaminant (e.g., 1993-1995, is a three year sequence covering 1993, 1994, and 1995.)

"Maximum contaminant level" or "MCL" means the maximum permissible level of a contaminant in water that is delivered to any user of a public water system.

"Non-transient non-community water system" means a Class A public water system that is not a community water system and that regularly serves at least 25 of the same individuals over six months per year (e.g., schools, churches, nursing home, and factories.)

Who can I contact at DEC if I have any questions or comments?

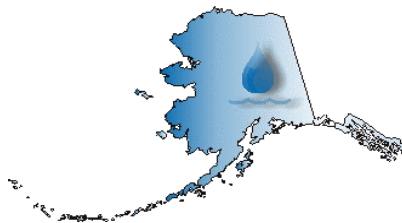
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